2025 too short time to eliminate tuberculosis from India

According to the recent budget announcement, the Government of India aims to eliminate tuberculosis (TB) by 2025. In strict sense, TB elimination means there should be <1 case of TB for a population of 10 lakh.[1] The World Health Organization (WHO) END TB Strategy adopted by World Health Assembly in 2014 aims to end the global TB epidemic with target to reduce TB deaths by 95% and to cut new cases by 90% between 2015 and 2035 and to ensure that no family is burdened with catastrophic expense due to TB. It sets interim milestones for 2020, 2025, and 2030^[2] and that means that there should be <10 cases of TB for a population of 1 lakh. Although the WHO target is to End TB by 2035 globally, as per declaration of the government of India, government intends to end TB by 2025. It is a welcome initiative and good commitment from the government. According to TB India annual report 2017, the incidence of TB has reduced from 289/lakh/year in 2000 to 217/lakh/year in 2015, and the mortality due to TB has reduced from 56/lakh/year in 2000 to 36/lakh/year in 2015.[3] With the current rate of annual decline of TB cases globally being 1.5%, India is lagging behind in its national decline rate. Even if incidence decline rate are increased by some percentage, elimination of TB from face of the earth is not expected before 2100. Even the WHO target for elimination of TB by 2050 from face of the earth would require acceleration of decline of TB incidence to 15%-19%/year instead of at present decline rate of 1.5%/year. If India wants to end TB by 2025, rate of decline of incidence of TB needs to be more than 10%-15%/year over next 8 years.[4]

TUBERCULOSIS BURDEN

TB occurs worldwide and remains an important cause of morbidity and mortality in many countries including India. There were an estimated 10.4 million new cases to 1.8 million TB-causing deaths globally in 2015.^[5] Of these, there were an estimated 2.8 million new cases in India, and 0.48 million people died in India due to TB in 2015.^[5] It is a cause for concern as India stands first in terms of absolute number of cases. The TB cascade of care in Indian public sector carried by the Indian Council of Medical Research, WHO and Harvard Medical School estimates 27 lakhs cases of TB in India. Only 14 lakhs TB patient are registered in India for treatment in 2014. While another 3.8 lakhs were notified from private laboratories, clinics, and hospitals between June 2014 and December 2015. Over a million of patients are missing, and government has no data about these missing patients.[6]

CHALLENGES OF MULTIDRUG-RESISTANT AND EXTENSIVELY DRUG-RESISTANT TUBERCULOSIS

In India, it is estimated that the prevalence of multidrug-resistant (MDR)-TB among new and previously treated patients was 2.5% and 16%, respectively. It is estimated that 130,000 cases of MDR-TB/rifampicin-resistance (RR)-TB emerge every year, of which 79,000 were among notified cases of TB in 2015. Out of 79,000 MDR-TB/RR-TB cases, only 28,876 (36%) were diagnosed, 26,988 (34%) were started on treatment, and treatment success rate was only 46%. [5] Since 2011, there have been rising instances of extensively drug-resistant TB (XDR-TB) in India. XDR-TB has been reported in all regions of the world, and it has become a serious emerging threat to global public health, especially in countries with a high prevalence of human immunodeficiency virus. Nearly 9.5% of MDR-TB cases were found to have XDR-TB. To date, a cumulative total of 117 countries have confirmed at least one case of XDR-TB. [5] According to the data reported on XDR-TB from India, it varied from 1.5% to 11% of MDR-TB cases.[7-10] It is estimated that in India, about 8000 XDR TB cases emerge every year. In 2015, 3048 XDR TB cases were diagnosed and 2130 cases put on treatment and the success rate was 31%. XDR-TB has raised the possibility that the current drug-susceptible TB will be replaced with a form of TB with severely restricted treatment options. This would halt the progress made in recent years to control TB. Indian patients have been fighting to get access to new anti-TB drugs such as bedaquiline which has been only introduced in 6 centers under conditional access program and delamanid which the government is yet to make fully available under the revised national TB program. Anyone who knows about TB will tell that TB elimination by 2025 is an impossible goal in India, especially with the world's highest TB as well as the MDR-TB burden.

WHAT IS NEEDED TO ELIMINATE TUBERCULOSIS FROM INDIA BY 2025?

It is almost a Herculean task to eliminate TB by 2025 going by the current scenario. But to reach even near to the goal, all stakeholders will have to work together. Government needs to drastically improve the implementation of national TB control program by increasing budget allocation to Revised National TB Control Programme to execute the TB control program more aggressively and effectively. Government also need to quickly roll out daily fixed-dose regimen under directly observed treatment

short course throughout the country and introduce new diagnostic technology and newer anti-TB drugs. The huge private sector in the country, where at least 50% cases of TB report for their treatment, needs to be engaged rapidly and effectively. There is an urgent need for drastic improvement in working of health sector in both public as well private sector. An effective surveillance and follow-up of all TB patients need to be ensured. There is also a need for an adequate social, emotional, and nutritional support to all TB patients. Unless all stake-holders come together for a cohesive effort, End TB strategy in India may only remain a distant goal.

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